

Appl. No. 09/689,092

Reply to Office Action of April 21, 2005

REMARKS

In the Office Action, claims 1-10 are rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 6,262,722 B1 ("*Allison*"). In the Office Action, the Patent Office essentially argues that the *Allison* reference discloses each and every feature of the claimed invention. In response, Claims 1, 9 and 10 have been amended; and Claim 8 has been cancelled without prejudice or disclaimer. Applicants believe that the anticipation rejection has been overcome in light of the amendments to Claims 1, 9 and 10, or minimally, for the reasons set forth below.

Independent Claim 1 recites an information processing apparatus comprising an icon specifying means for specifying a desired icon from icons displayed in an array hierarchical structure. The apparatus also includes a first display control means for controlling a display of icons in a hierarchical format. This first display control means controls a plurality of icons on a first hierarchical layer, a plurality of icons on a second hierarchical layer lower than the first, a plurality of icons on a third hierarchical layer lower than the second and a plurality of icons on a fourth hierarchical layer lower than the third. The number of first icons and the number of second icons displayed on the screen are determined by the display area of the screen. When the icon specifying means specifies one of the second icons in the array hierarchical structure, the array of first, second and third icons are displayed on the screen in an array hierarchical structure.

The apparatus also includes a second display control means for changing the array hierarchical structure displayed on the screen. This is accomplished by replacing the first icons with the second icons in the array hierarchical structure, replacing the second icons with the third icons in the array hierarchical structure and replacing the third icons with the fourth icons in the array hierarchical structure.

Additionally, the apparatus includes a layer-count acquiring means for acquiring the number of hierarchical layers to be displayed, wherein the aforementioned first display control means is capable of controlling the display to exhibit icons pertaining to as many hierarchical layers as acquired by the layer-count acquiring means. Claim 9 and 10 have been amended in a similar way as provided above.

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Applicants believe that the *Allison* reference is distinguishable with respect to the claimed invention at least for the following reasons. Nowhere does *Allison* teach or disclose a layer-count acquiring means for acquiring the number of hierarchical layers to be displayed where the first display control means is capable of controlling the display to exhibit icons pertaining to as many hierarchical layers as acquired by the layer-count acquiring means. Instead, *Allison* discloses control circuitry that initially generates a navigator menu and automatically displays the available program guide categories (e.g., a plurality of icons on a first hierarchical layer) with a number of program guide options associated with the program guide categories (e.g., a plurality of icons on a second hierarchical layer) (column 4, lines 39-47, 53-59). Further, *Allison* teaches that the number of program guide categories are preferably only shown a few at a time (e.g. three at one time), and once selected, the corresponding program guide options are preferably displayed in a single column to avoid clutter (column 4, lines 56-59). Clearly, this suggests that *Allison* fails to provide a means for acquiring the number of hierarchical layers to be displayed by a layer-count acquiring means as claimed.

Indeed, *Allison* states that "there is a limit to the number of selectable program guide options that are typically displayed at a time," and that only six of the possible ten program guide options are displayed simultaneously (column 1, lines 65-67, column 2, lines 1-3). Significantly, *Allison* does not suggest that users have the ability to set this limit. Furthermore, *Allison's* statement that, "[i]f desired, additional columns of selectable program guide options may be displayed adjacent to the *single column* of selectable program guide options displayed under the central program guide category," is merely a restatement of the notion that a few program guide options can be shown simultaneously, and in no way suggests that the user has the ability to choose the number of program guide options to be displayed (column 2, lines 28-31) (emphasis added).

Moreover, *Allison* teaches that the number of program guide categories (e.g., first hierarchical layer icons) and program guide options (e.g., second hierarchical layer icons) displayed on the screen should be limited to a few categories to provide display room for "helpful text messages" and reduce clutter (column 4, lines 53-67). The term "clutter" is subjective and describes the relationship between the amount of information shown on the display and the overall display area. For example, showing ten program options on a 13" screen

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at one time may appear cluttered, however, when those same 10 program options are shown on a 62" screen they may appear sparse. Thus, users with large display screens may prefer to see many icons in order to speed up navigation, while users with smaller display screens may prefer to see fewer icons in order to minimize confusion. The current invention offers a distinct advantage over *Allison* in this regard, by allowing the user to choose how much information they see at one time according to their preference, instead of being limited to a set number of icons.

Additionally, the current invention determines the number of icons shown under each hierarchical level according to the display area. Nowhere does *Allison* disclose or suggest that the number of icons displayed is dependent on the display area of the screen. *Allison* simply teaches that the number of simultaneously displayed hierarchical layers and their corresponding icons are limited to avoid clutter (column 4, lines 39-47, 53-59). Thus under *Allison*, even if the display area is large and would accommodate a large number of icons under each hierarchical layer, the actual number of icons displayed would be limited to a few categories or program guide options, in what appears to be a predetermined and non-adaptive manner (column 1, lines 28-39, 65-67, column 4, lines 53-67). In contrast, the claimed invention provides a "smart display" capable of automatically adjusting the number of icons displayed under each hierarchical level according to the display screen area.

For example, if the user chooses to display three levels of hierarchical layers, the number of icons displayed under each hierarchical level will automatically be adjusted according to the display screen area as claimed. Thus, if two users, one with a 62" display, the other with a 13" display, select 3 hierarchical layers to be displayed at one time, the user with the 62" display may be able to see 20 icons per hierarchical level, while the user with the 13" display may only see 5 icons per hierarchical level. In this regard, the number of icons displayed can be automatically adjusted as claimed to match the display area even though both users selected the same number of hierarchical layers to be displayed. In comparison, *Allison* fails to disclose or suggest that the number of icons displayed is dependant on display area, and would show the same number of icons on a 13" display as it would on a 62" display (column 1, lines 28-39, 65-67, column 4, lines 53-67). Therefore, Applicants believe that *Allison* is distinguishable from the claimed invention for at least these reasons.

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In the Office Action, Claims 2-8 are rejected under 35 U.S.C. § 102(e) as allegedly unpatentable in view of *Allison*. Claim 8 has been cancelled without prejudice or disclaimer, and Claims 2-7 depend from Claim 1 either directly or indirectly. Thus, *Allison* on its own is distinguishable from Claims 2-7 at least for substantially the same reasons as discussed above with respect to Claim 1 the rejection with respect to claim 8 has been rendered moot and thus should be withdrawn.

As previously provided, independent Claims 9 and 10 represent a method and recording medium respectively, with substantially the same functionality as the apparatus in Claim 1, and have been amended to incorporate the changes previously presented in Claim 1. Thus Claims 9 and 10 are distinguishable from *Allison* at least for the substantially the same reasons as discussed above with respect to Claim 1.

For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

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